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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

**Complete if Known**

|                               |                          |
|-------------------------------|--------------------------|
| <b>Application Number</b>     | <b>10/720,582</b>        |
| <b>Filing Date</b>            | <b>November 24, 2003</b> |
| <b>First Named Inventor</b>   | <b>Kutsovsky</b>         |
| <b>Group Art Unit</b>         | <b>1754</b>              |
| <b>Examiner Name</b>          | <b>Cooke, Colleen P.</b> |
| <b>Attorney Docket Number</b> | <b>02019CON</b>          |
| <b>LVM Reference No.</b>      | <b>225308</b>            |

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| Sheet | 1 | of | 1 |
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| FOREIGN PATENT DOCUMENTS |          |                         |                              |           |                                    |                     |             |      |
|--------------------------|----------|-------------------------|------------------------------|-----------|------------------------------------|---------------------|-------------|------|
| Examiner Initials        | Doc. No. | Foreign Patent Document |                              |           | Name of Patentee or Applicant      | Date of Publication | Translation |      |
|                          |          | Office                  | Application or Patent Number | Kind Code |                                    |                     | Yes         | No** |
| CL                       | CT       | DE                      | 199 55 456                   | A1        | Degussa-Huls AG                    | May 23, 2001        |             | X*   |
| I                        | CU       | EP                      | 0 471 139                    | A2        | Corning Incorporated               | Feb. 19, 1992       |             |      |
|                          | CV       | WO                      | 90/10596                     | A1        | TSL Group PLC                      | Sep. 20, 1990       |             |      |
|                          | CW       | WO                      | 90/15019                     | A1        | Cabot Corporation                  | Dec. 13, 1990       |             |      |
| CL                       | CX       | WO                      | 98/09753                     | A1        | Nanomaterials Research Corporation | Mar. 12, 1998       |             |      |

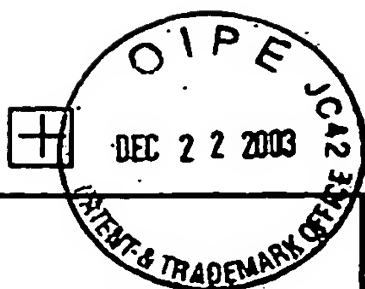
| OTHER - NON PATENT LITERATURE DOCUMENTS |             |  |             |      |
|---|-------------|--|-------------|------|
| Examiner<br>Initials                    | Doc.<br>No. | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number (s), publisher, city and/or country where published. | Translation |      |
|   |             |  | Yes         | No** |
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Colin P. Cook

2/3/06

- \* A concise statement of relevance is being submitted in lieu of a translation. 37 CFR 1.98(a)(3).
- + An English-language equivalent/patent, or an English-language abstract, or an English-language version of the search report or action by a foreign patent office in a counterpart foreign application indicating the degree of relevance found by the foreign office is being submitted in lieu of a concise explanation of relevance under 37 CFR 1.98(a)(3).

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# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

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| Sheet | 1 | of | 4 |
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| Complete if Known      |                   |
|------------------------|-------------------|
| Application Number     | 10/720,582        |
| Filing Date            | November 24, 2003 |
| First Named Inventor   | Kutsovsky         |
| Group Art Unit         | Unassigned        |
| Examiner Name          | Unassigned        |
| Attorney Docket Number | 02019             |
| LVM Docket Number      | 225308            |

## U.S. PATENT DOCUMENTS

| Examiner Initials | Doc. No. | U.S. Patent Document         |           | Name of Patentee or Applicant | Date of Publication | Filing Date If Appropriate |
|-------------------|----------|------------------------------|-----------|-------------------------------|---------------------|----------------------------|
|                   |          | Application or Patent Number | Kind Code |                               |                     |                            |
| CL                | AA       | Re. 28,974                   |           | Morgan et al.                 | Sep. 21, 1976       |                            |
|                   | AB       | 2,631,083                    |           | Engelson et al.               | Mar. 10, 1953       |                            |
|                   | AC       | 2,693,406                    |           | Wendell, Jr. et al.           | Nov. 2, 1954        |                            |
|                   | AD       | 2,771,344                    |           | Michel et al.                 | Nov. 20, 1956       |                            |
|                   | AE       | 2,773,741                    |           | Antonsen                      | Dec. 11, 1956       |                            |
|                   | AF       | 2,780,525                    |           | Wendell, Jr. et al.           | Feb. 5, 1957        |                            |
|                   | AG       | 2,801,901                    |           | Dingman et al.                | Aug. 6, 1957        |                            |
|                   | AH       | 2,803,038                    |           | Holland et al.                | Aug. 20, 1957       |                            |
|                   | AI       | 2,828,186                    |           | Dingman et al.                | Mar. 25, 1958       |                            |
|                   | AJ       | 2,829,949                    |           | Wendell, Jr. et al.           | Apr. 8, 1958        |                            |
|                   | AK       | 2,847,316                    |           | Michel et al.                 | Aug. 12, 1958       |                            |
|                   | AL       | 3,006,738                    |           | Wagner                        | Oct. 31, 1961       |                            |
|                   | AM       | 3,007,774                    |           | Stokes et al.                 | Nov. 7, 1961        |                            |
|                   | AN       | 3,024,089                    |           | Spencer et al.                | Mar. 6, 1962        |                            |
|                   | AO       | 3,065,093                    |           | Berstein et al.               | Nov. 20, 1962       |                            |
|                   | AP       | 3,112,210                    |           | Carpenter et al.              | Nov. 26, 1963       |                            |
|                   | AQ       | 3,130,008                    |           | Stokes et al.                 | Apr. 21, 1964       |                            |
|                   | AR       | 3,166,542                    |           | Orzechowski et al.            | Jan. 19, 1965       |                            |
|                   | AS       | 3,203,762                    |           | Carpenter                     | Aug. 31, 1965       |                            |
|                   | AT       | 3,205,177                    |           | Orzechowski et al.            | Sep. 7, 1965        |                            |
|                   | AU       | 3,205,178                    |           | Orzechowski et al.            | Sep. 7, 1965        |                            |
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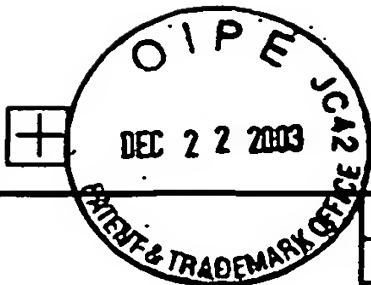
| Examiner Initials | Doc. No. | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number (s), publisher, city and/or country where published. | Translation |      |
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|                   |          |  | Yes         | No** |
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|--------------------|-------------------------|-----------------|--------|
| Examiner Signature | <i>Colleen L. Coode</i> | Date Considered | 2/3/06 |
|--------------------|-------------------------|-----------------|--------|

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(Use as many sheets as necessary)

## **Complete if Known**

|                        |                    |
|------------------------|--------------------|
| Application Number     | 10/720,582         |
| Filing Date            | November 24, 2003  |
| First Named Inventor   | Yakov E. KUTSOVSKY |
| Group Art Unit         | Unassigned         |
| Examiner Name          | Unassigned         |
| Attorney Docket Number | 02019              |
| LVM Docket Number      | 225308             |

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| Sheet | 2 | of | 4 |
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|-------------------|----------|------------------------------|-----------|-------------------------------|---------------------|----------------------------|
|                   |          | Application or Patent Number | Kind Code |                               |                     |                            |
| CC                | AW       | 3,322,499                    |           | Carpenter et al.              | May 30, 1967        |                            |
|                   | AX       | 3,363,980                    |           | Krinov                        | Jan. 16, 1968       |                            |
|                   | AY       | 3,365,274                    |           | Carpenter et al.              | Jan. 23, 1968       |                            |
|                   | AZ       | 3,372,001                    |           | Wendell                       | Mar. 5, 1968        |                            |
|                   | BA       | 3,406,228                    |           | Hardy et al.                  | Oct. 15, 1968       |                            |
|                   | BB       | 3,455,653                    |           | Aftandilian                   | Jul. 15, 1969       |                            |
|                   | BC       | 3,488,204                    |           | Jordan et al.                 | Jan. 6, 1970        |                            |
|                   | BD       | 3,493,342                    |           | Weaver et al.                 | Feb. 3, 1970        |                            |
|                   | BE       | 3,510,291                    |           | Brush                         | May 5, 1970         |                            |
|                   | BF       | 3,510,292                    |           | Hardy et al.                  | May 5, 1970         |                            |
|                   | BG       | 3,607,049                    |           | Weaver, Jr. et al.            | Sep. 21, 1971       |                            |
|                   | BH       | 3,619,140                    |           | Morgan et al.                 | Nov. 9, 1971        |                            |
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|                   | BJ       | 3,922,335                    |           | Jordan et al.                 | Nov. 25, 1975       |                            |
|                   | BK       | 4,023,961                    |           | Douglas et al.                | May 17, 1977        |                            |
|                   | BL       | 4,879,104                    |           | List et al.                   | Nov. 7, 1989        |                            |
|                   | BM       | 4,937,062                    |           | Jordan et al.                 | Jun. 26, 1990       |                            |
|                   | BN       | 6,086,841                    |           | Lee                           | Jul. 11, 2000       |                            |
| CC                | BO       | 6,364,944                    |           | Mahmud et al.                 | Apr. 2, 2002        |                            |

## **FOREIGN PATENT DOCUMENTS**

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|                   |          | Office                  | Application or Patent Number | Kind Code |                               |                     | Yes         | No** |
| CC                | BP       | JP                      | 59-223217                    | A         | Tokuyama Soda KK              | Dec. 15, 1984       | X           |      |
|                   |          |                         |                              |           |                               |                     |             |      |
|                   |          |                         |                              |           |                               |                     |             |      |
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## **OTHER - NON PATENT LITERATURE DOCUMENTS**

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Examiner Signature

*Colleen P. Gothe*

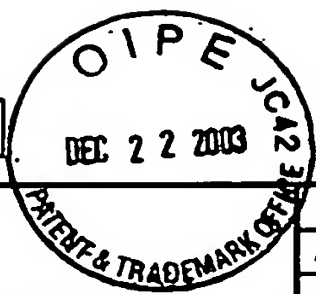
Date Considered

*2/3/06*

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| Application Number     | 10/720,582         |
| Filing Date            | November 24, 2003  |
| First Named Inventor   | Yakov E. KUTSOVSKY |
| Group Art Unit         | Unassigned         |
| Examiner Name          | Unassigned         |
| Attorney Docket Number | 02019              |
| LVM Docket Number      | 225308             |

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| Sheet | 3 | of | 4 |
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|-------------------|----------|--|-------------|------|
|                   |          |  | Yes         | No** |
| CL                | BQ       | BRIESEN et al., "The effect of precursor in flame synthesis of SiO <sub>2</sub> ," <i>Chem. Eng. Sci.</i> , 53(24), 4105-4112 (1998)   |             |      |
| CL                | BR       | BRIESEN et al., "Synthesis of SiO <sub>2</sub> particles from organometallic precursors," <i>World Congress on Particle Technology</i> , 3, 1-6 (1998)   |             |      |
| CL                | BS       | BRUNAUER et al., "Adsorption of gases in multimolecular layers," <i>J. Am. Chemical Society</i> , 60, 309-319 (1938)   |             |      |
| CL                | BT       | DAVIDSON et al., "Kinetics of the thermolysis of octamethylcyclotetrasiloxane in the gas phase," <i>J.C.S. Faraday Transactions I</i> , 71, 2260-2265 (1975)   |             |      |
| CL                | BU       | DAVIDSON et al., "Kinetics of the oxidation of octamethylcyclotetrasiloxane in the gas phase," <i>J.C.S. Faraday Transactions I</i> , 72, 1088-1095 (1976)   |             |      |
| CL                | BV       | GLASSMAN, <i>Combustion</i> , Academic Press, Orlando (1987), pp. 15-27.   |             |      |
| CL                | BW       | GLUMAC, "Formation and consumption of SiO in powder synthesis flames," <i>Combustion and Flame</i> , 125, 702-711 (2001)   |             |      |
| CL                | BX       | HASEGAWA et al., "Effect of additive oxides on ultrafine CeO <sub>2</sub> particles synthesized by the spray-ICP technique," <i>J. Mat. Sci. Letters</i> , 15(18), 1608-1611 (1996)  |             |      |
| CL                | BY       | HSIHIEH, "Predicting heats of combustion and lower flammability limits of organosilicon compounds," <i>Fire Mater.</i> , 23, 79-89 (1999)  |             |      |
| CL                | BZ       | HUNG et al., "Formation of mixed oxide powders in flames: Part I. TiO <sub>2</sub> -SiO <sub>2</sub> ," <i>J. Mater. Res.</i> , 7(7), 1861-1869 (July 1992)  |             |      |
| CL                | CA       | INGEBO et al., "Drop-size distribution for crosscurrent breakup of liquid jets in airstreams," National Advisory Committee for Aeronautics Technical Note 4087 (1957)  |             |      |
| CL                | CB       | KAMMLER et al., "Flame synthesis of nanoparticles," <i>Chem. Eng. Technol.</i> , 24(6), 583-596 (2001)   |             |      |
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| CL                | CG       | KROSCWITZ, exec. ed., <i>Kirk-Othmer Encyclopedia of Chemical Technology</i> , 4 <sup>th</sup> ed., John Wiley & Sons, New York (1997), pp. 1026-1027  |             |      |
| CL                | CH       | MÄDLER et al., "Controlled synthesis of nanostructured particles by flame spray pyrolysis," <i>J. Aerosol Sci.</i> , 33, 369-389 (2002)  |             |      |

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|--------------------|--------------------------|-----------------|--------|
| Examiner Signature | <i>William P. Gotsch</i> | Date Considered | 2/3/04 |
|--------------------|--------------------------|-----------------|--------|

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| Sheet | 4 | of | 4 | Attorney Docket Number | 02019  |
|       |   |    |   | LVM Docket Number      | 225308 |

## OTHER - NON PATENT LITERATURE DOCUMENTS

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| Examiner Signature | Colleen P. Gorb | Date Considered | 2/3/16 |
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